
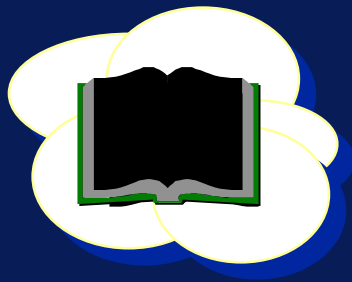




EPACT: Section 506 Report

Richard L. Bechtold
QSS Group, Inc.
Clean Cities Conference
June 1998





Energy Policy Act of 1992 (EPACT)

- **Designed to Reduce Dependence on Foreign Oil & Improve Energy Efficiency**
- **Set Alternative Fuel Goals for U.S.**
- **Defined Alternative Fuels**
- **Set Fleet AFV Requirements**
- **Established Tax Deductions and Credits for AFVs & Infrastructure**



EPACT Goals

[Section 502(b)(2)]

- **Displace transportation fuel with replacement fuels**
 - 10% by year 2000
 - 30% by year 2010

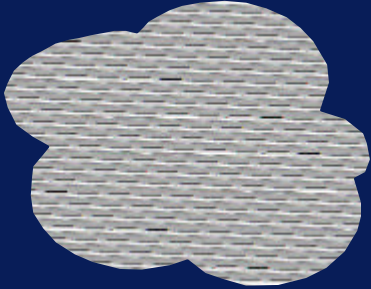


What is *The 506 Report?*

Required by Section 506 of EPACT

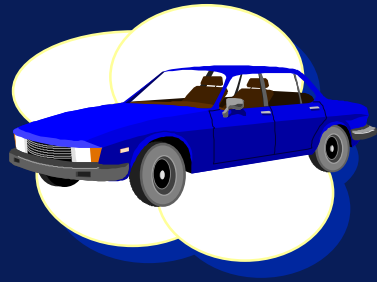
Evaluates:

- **progress made in achieving fuel displacement goals**
 - **role of replacement fuels and AFVs in reducing oil imports**
 - **availability of domestic replacement fuels and AFVs**
- 



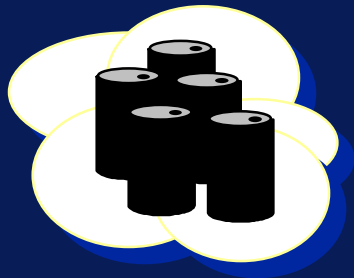
Energy Security Concerns

- Geopolitical setting has changed since previous oil shocks.
- Economic trends are setting the stage for a future oil shock.
- Future oil shock would reduce U.S. economic activity by 2%/yr..
- U.S. national security related to energy security.

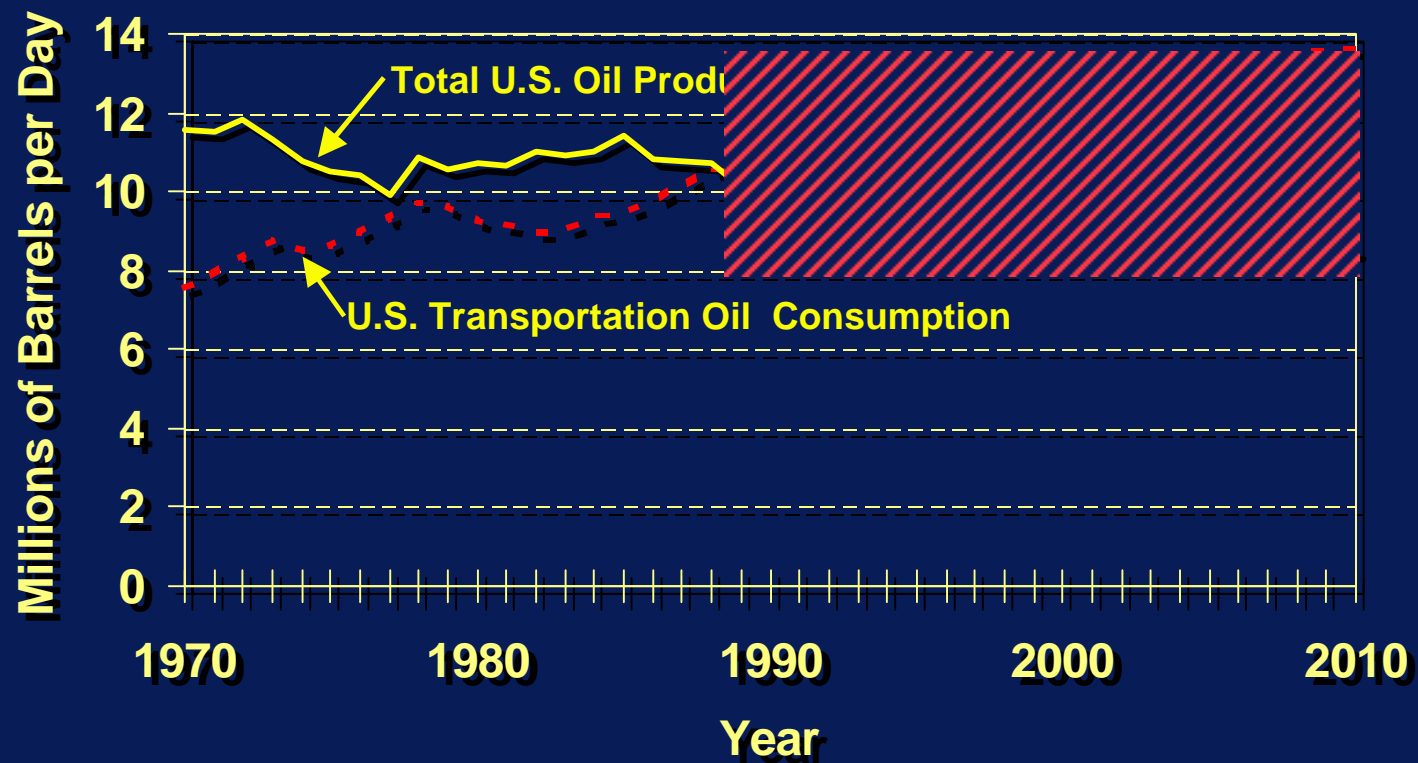


Critical Role of Transportation

- **U.S. energy use has changed since the oil shocks of the '70s.**
 - consumption has been reduced
 - efficiency has increased
 - energy types have been diversified
- **...except in the transportation sector!**



Transportation Oil Consumption Gap

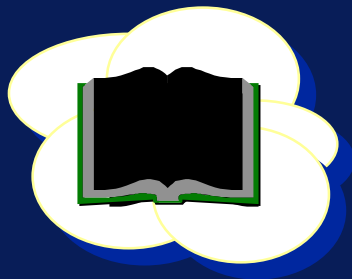




FINDINGS:

Federal Fleet Program

- **20,000 AFVs on the road**
 - **U.S. Postal Service**
 - **Department of Defense**
 - **General Services Administration**
- **Prompted automakers to expand availability of AFVs**



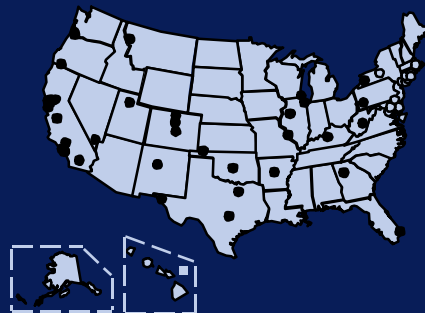
Rulemaking and Analytical Activities

■ Rulemakings

- **Alternative Fuel Provider Mandate (sec. 501)**
- **Mandatory State Fleet Programs (sec. 507(o))**
- **ANOPR for possible Private Fleet Mandate (sec. 507(b))**

■ Analyses

- **technical and economic feasibility of reaching 10% and 30% fuel displacement goal**
- **annual estimate of AFVs**



Clean Cities Program

- **“Grass-roots approach”**
 - voluntary commitments to acquire AFVs and install infrastructure
 - create a sustainable, nationwide AF market
- **62 designated *Clean Cities***
- **Over 1,000 stakeholder organizations**
 - governmental entities
 - private fleets
 - alternative fuel providers



Research and Development Programs

■ Advanced Vehicle Propulsion

- hybrid propulsion systems
- transportation fuel cells
- advanced heat engines

■ Alternative Fuels

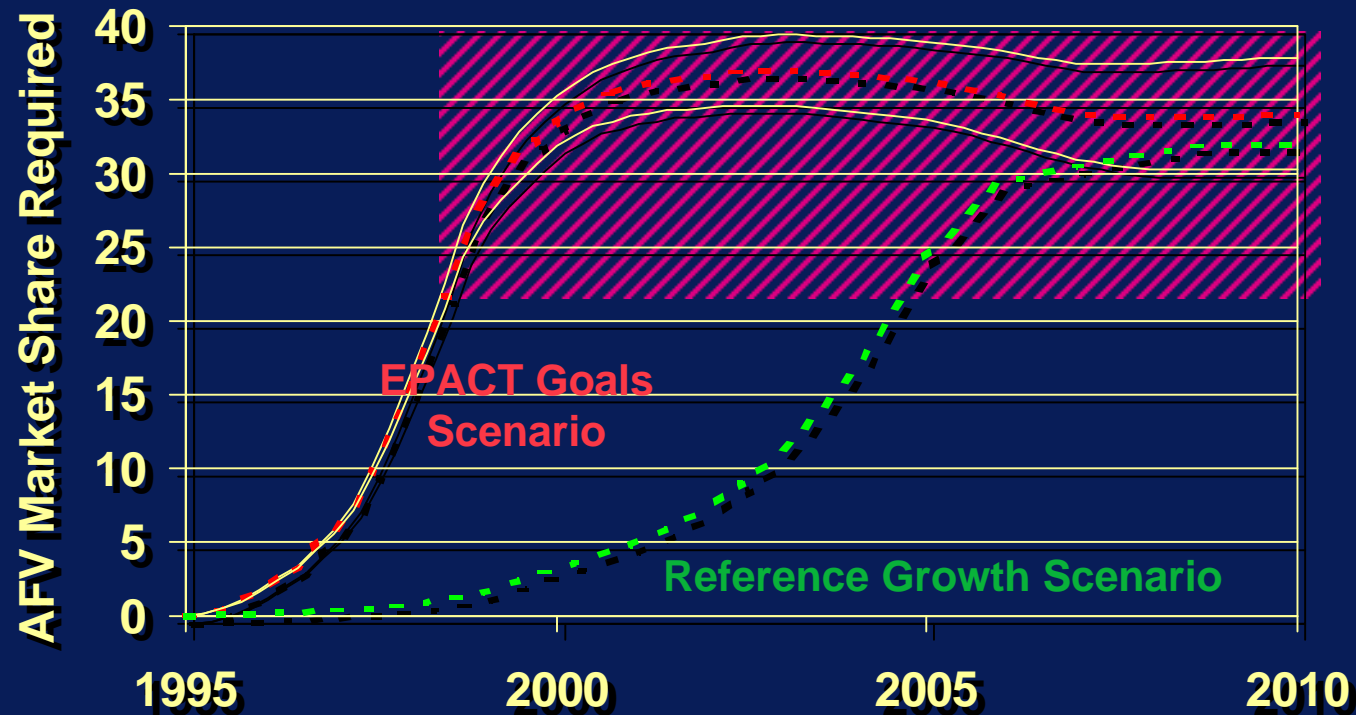
- cost and performance of AFVs
- competitive alternative fuels
- fuels from domestic sources

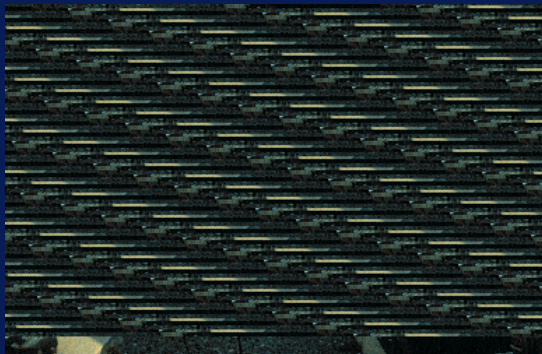
Role of Replacement Fuels and AFVs

- **Potential is very high**
 - market could support 30-38% by 2010
- **Potential barely realized**
 - only 3.1% in 1996
 - 2.9% was oxygenates
 - 0.2% used by AFVs
- **Current programs could reach 3.1%
by 2010**



Required Market Penetration





A Role for Fleets

- **Fleets are critical in transition to alternative fuels and vehicles.**
- **EPACT Title V focuses on fleets.**
- **Mandates certain fleets to get AFVs:**
 - **demonstrate that technology is practical**
 - **pave the way for alternative fuel use**
 - **accelerate alternative fuel infrastructure**

Availability of AFVs

■ Passenger cars

- flexible fuel vehicles (FFVs)
- electric vehicles (EVs)

■ Pickup trucks and vans

- 85% ethanol
- dedicated/bifuel CNG
- LPG

■ Conversions


- dedicated or bifuel LPG and CNG

Availability of Alternative Fuels

- All major alternative fuels available:
 - national and regional levels
 - domestic production and imports
- NG, ethanol, and electricity have potential for domestic production.
- LPG and methanol could be domestic or imported.



KEY ISSUES and PERSPECTIVES

- **Economics**
 - **Price Spikes Insufficient**
 - **Investment in Infrastructure**
 - **Plan for Future Transitions**
- 



A Need for Dialog

- **Current programs will fall short of EPACT 30% goal by 2010.**
 - DOE may need to modify goal
 - roll back target dates (sec 504)
- **Discuss possible additional programs**
 - energy security
 - fuel displacement/fuel switching
- **Need clarity and continuity in Federal policy**